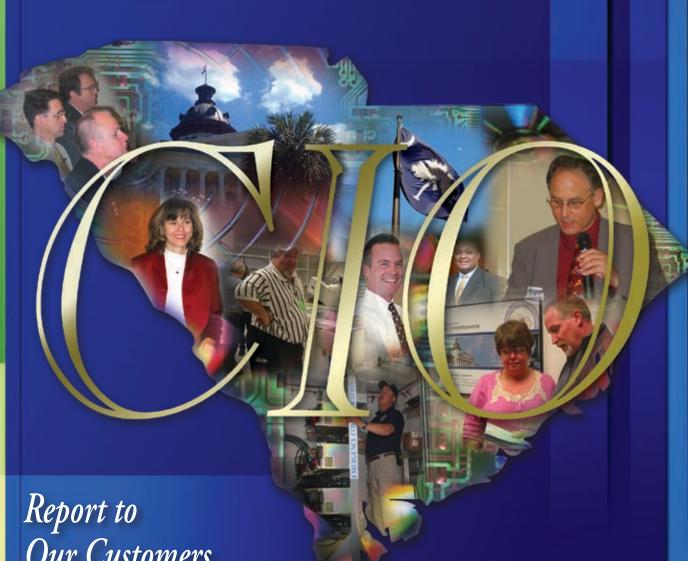


# Connecting People and Information



Our Customers

2006

www.cio.sc.gov



# Connecting People and Information

### **CONTENTS**

MESSAGE FROM THE STATE CIO	1
2006 HONOR ROLL	2
EXECUTIVE SUMMARY	3
PROFILE	8
ENTERPRISE INITIATIVES	10
BUSINESS RESULTS	15
CONCLUSION	18















# Connecting People and Information

### **MESSAGE FROM THE STATE CIO**

On behalf of the State Chief Information Officer (CIO), we are pleased to present the "2006 Report to Our Customers." This report reflects our commitment to you, our customer, to provide best value services through collaboration and partnership.

The CIO strives to be innovative in its use of technology to set a trend that will promote growth, efficiency and financial stability for our customers. We highlight in this report some of the enterprise initiatives and major projects that were implemented through public and private partnerships to make government better.

We value the open exchange of ideas and solutions and the coordination of resources between governmental entities. During this fiscal year, the CIO took its "Open House" concept on the road to our customers in Charleston, Florence and Greenville. In addition, we held our third Open House in Columbia which afforded our customers the opportunity to learn, interact and tour the State Data Center.

We continuously search for more efficient ways to manage our costs. In its annual review, the Gartner Group ranked the CIO "best in class" overall in an analysis of IT service expenditures comparing the CIO to its peer group.

Thank you for your trust and loyalty throughout the year. As we move forward, we welcome new challenges that will lead to new opportunities for technological advances and improved statewide services. With a renewed focus on you, our customer, we look forward to a future of cooperation and innovation.

Please contact us at any time and we invite you to visit our Web site at www.cio.sc.gov for up-to-date information on our products and services.

Sincerely,

Jim Bryant, Ph.D. State Chief Information Officer



### **2006 HONOR ROLL**

## BLUE RIBBON WINNER

SC.gov

The Official Web Site of the State of South Carolina



### GOLD

- Cyber Security
- Disaster Recovery State Term Contract Expansion
- Element K
   Online Training Solutions

   State Term Contract
- Multiprotocol Label Switching (MPLS) State Term Contract
- South Carolina Consolidated Procurement Code Revision

## SILVER

- Beeline Vendor Management State Term Contract
- Mainframe z/OS Implementation
- Palmetto 800 MHz System
- South Carolina Enterprise Information System (SCEIS) Infrastructure Installation and Solution Center
- Voter Registration
   Database Comparison

### BRONZE

- Customer Work Order Fulfillment (CWOF) Upgrade
- Employee Insurance Program (EIP) Migration
- Enterprise Print and Mail Facility









# Connecting People and Information

### **EXECUTIVE SUMMARY**

The Division of the State Chief Information Officer (CIO) is committed to delivering high quality information technology services that our customers need to serve State government constituents and South Carolina citizens. The CIO strives to improve our services and work processes to keep pace with the changing environment of information technology. This executive summary shares the highlights of projects and accomplishments for fiscal year 2006.

#### **SC.gov**

Launched in November 2005, SC.gov, the official Web site of the State of South Carolina, continues to grow and positively impact all South Carolinians by providing citizens and businesses easy access to the State's online services. A payment engine, Content Management Server (CMS) and online shopping mall are the cost saving features offered through this innovative public-private partnership between the State and South Carolina Interactive, a Columbia-based subsidiary of eGovernment firm NIC. During fiscal year 2006, SC.gov:

- Was recognized by the South Carolina State Library with a 2005 Notable State Document Award for the State's Web site.
- Launched Phase I of the Ethics Commission's Campaign Finance Reporting Application.
   This application provides candidates for South Carolina constitutional offices the ability to upload campaign contribution and expenditure

filings electronically as well as offers citizens the ability to search findings by candidate or contributor name on a 24/7 basis.

- Launched a Content Management Server (CMS) enterprise application. A total of 16 agencies to include 62 individual participants were trained to use CMS with five agencies currently in production.
- Launched a Newsroom enterprise application.
   A total of 52 individual participants and 29 separate agencies received training on the Newsroom application.
- Launched a hunting and fishing sales application for the South Carolina Department of Natural Resources (DNR) including point of sale, Internet and call center. At a reduced convenience fee of \$3 per license, DNR customers could purchase licenses using their debit or credit card. SC.gov's secure payment system made payments safe and easy and provided customers the ability to print the licenses instantly from their computers.
- Launched a Web site and volunteer registration for the National Governors Association South Carolina Host Committee.

#### Cyber Security

In the case of a security event, South Carolina's 24/7 Security Operations Center (SOC) monitors and activates the South Carolina Information Sharing and Analysis Center (SC-CSIRT). The







# Connecting People and Information

centerpiece of the SOC, implemented during fiscal year 2006, is a Security Information Management System (SIMS) referred to as Cyber Sentry which enables government entities to integrate information from network and application layers for improved threat identification, compliance and security decision support.

Cyber Sentry extends the system's existing support for monitoring application security to include correlation and reporting on actual user activity within an application to demonstrate the security of data as it is accessed throughout a transaction – a critical requirement for achieving ongoing regulatory compliance.

Creating a central location for events to be recorded and monitored, South Carolina is one of the first states with such a comprehensive view of the security posture of its network and is uniquely positioned to understand and combat serious security events.

Putting its security network to the test, the CIO participated in the first full-scale government-led cyber security exercise – Cyber Storm – hosted by the U.S. Department of Homeland Security (DHS) in February 2006. The exercise simulated a sophisticated cyber attack through a series of scenarios directed against critical infrastructures.

The purpose of the event was to examine response, coordination and recovery mechanisms to a simulated cyber-event within international, federal, state and local governments, in conjunction with the private sector. Cyber Storm involved 115 public, private and international agencies, organizations and companies in the planning and implementation.

### DISASTER RECOVERY STATE TERM CONTRACT EXPANSION

The CIO awarded a State term contract to SunGard Availability Services for Disaster Recovery services that provides disaster recovery for mainframes, adds over 70 servers to support the Enterprise Computing platforms, and provides facility-based, mobile site and quick ship recovery services for many platforms. This multi-agency contract allows other State agencies to use it for their disaster recovery needs to include the tiered volume discount that the CIO obtained for its large server farm.

This State term contract provides a dedicated connection to the recovery facility for server traffic in addition to a dedicated connection for mainframe traffic. The Web Re-Direct option enables Internet connections to the recovery system. Also provided are networking options that allow recovery system end users to provision recovery networking outside the State network.

### ELEMENT K ONLINE TRAINING SOLUTIONS STATE TERM CONTRACT

The CIO awarded a multi-agency State term contract to Element K for online training solutions. Element K comprises over 2000 Web-based courses covering a range of topics to include information technology, computing, business management and compliance.

For a nominal fee, Element K courses are accessible 24/7 and generally take between two to five hours to complete; however, users could schedule their training time down to the topic level which may take only 10 minutes to complete. Self-development









# Connecting People and Information

through continuous improvement, teamwork and knowledge is an essential ingredient in preparing public servants to work as skilled, cohesive teams.

### MULTIPROTOCOL LABEL SWITCHING (MPLS) STATE TERM CONTRACT

Spirit Telecom was awarded a State term contract for a Multiprotocol Label Switching (MPLS) network. Replacing the statewide data network, MPLS is a single infrastructure (voice, video and data) that ensures mission-critical traffic receives priority to move through the network. In addition, this single infrastructure provides for economical and reliable network access while allowing multiple access options from any location within South Carolina and enforcement of additional security requirements and privacy regulations.

Other services that are part of the MPLS contract include a customized Web site for the State. The site serves as an online portal, allowing users of the MPLS network to access an automated system for billing, ordering, provisioning, service level management and trouble reporting.

### South Carolina Consolidated Procurement Code Revision

On June 13, 2006, amendments to the Consolidated Procurement Code were signed into law by Gov. Mark Sanford. Submitted by the South Carolina Budget and Control Board's Materials Management Office and CIO, the amendments, to highlight a few of the changes that govern routine activities, increased small purchase spending by agencies to \$50,000, reduced the number of days to file a protest of award to 10 days, and required

documentation of the 10 percent provision for State term contracts.

### Beeline Vendor Management State Term Contract

Beeline, a vendor manager for information technology temporary personnel, replaced the "SmartPerson" contract which ended in February 2005. Beeline provides personalized support and services that deliver automation and best practices in the areas of workforce acquisition, management and analytics.

#### MAINFRAME Z/OS IMPLEMENTATION

Implementation for z/OS 1.7, an upgrade from version 1.4, began in February 2006 and is to be completed in March 2007 to ensure compliance with support. z/OS is an operating system for mainframes; the "z" stands for "zero down-time" and "OS" stands for "operating system."

The CIO mainframe is divided into five logical partitions known as LPARs which segments different parts of the mainframe for individual agencies or groups. Each LPAR has its own operating system and software which had to be tested prior to the conversion. The testing process was extremely time sensitive and was typically conducted during the evening hours or weekends.

Upgrading all five LPARs affected approximately 30,000 users representing approximately 70 different agencies. For example, the South Carolina Department of Mental Health's conversion to z/OS.e was made prior to July 1, 2006, through a phased in approach which resulted in immediate processing power.







# Connecting People and Information

#### PALMETTO 800 MHz System

The South Carolina 800 MHz Radio and Mobile Data System (Palmetto 800 MHz), a cost-shared public-private partnership between state and local governments, power utilities and Motorola, Inc., played a key role in facilitating communication between rescue and law enforcement during the aftermath of Hurricane Katrina's mammoth destruction in Louisiana and Mississippi.

CIO partnered with the University of South Carolina (USC) to convert a vacant Naval Reserve Center located on the USC campus to a thriving one stop Resource Center for hundreds of Hurricane Katrina evacuees.

Also during fiscal year 2006, the CIO received a \$50,000 federal grant to provide each of the selected agencies with a complete mobile data unit for use on the Palmetto 800 MHz System at no cost to the agencies. It includes installation, National Crime Information Center (NCIC) access, wireless data access and a touch screen rugged laptop. Placed in patrol cars, the laptops will allow officers to retrieve driver's license information, license tag information and warrants in the field through the help of the Palmetto 800 MHz System.

## South Carolina Enterprise Information System (SCEIS)

The South Carolina Enterprise Information System (SCEIS) project moved from the Business Blueprint and Plan phase, where the State's core business processes for finance and materials management were defined and documented, to Implementation phase. Building upon a SAP infrastructure, a proven Enterprise Resource Planning (ERP) system, SCEIS will become the vehicle to integrate, standardize and streamline business processes within the government and information systems of South Carolina.

The SCEIS infrastructure consists of:

- 51 Hewlett Packard (HP) DL series rack mount servers running Windows-based operating systems
- SQL 2005 Enterprise backend database
- Five landscapes: Production, Quality Assurance, Development, Sandbox and Training
- Two HP storage area networks (SAN) attached to these landscapes and segmented into one production (5.7 terabytes of storage) and one non-production (6.8 terabytes of storage) SAN
- Automated tape library (40+ terabytes of storage)

The SCEIS Solution Center opened its doors to provide agencies with a demonstration site for hands-on testing of the new system. A frontend facility to give agency in-house SCEIS implementation teams a chance to preview and practice, the Solution Center provides workstations that allow users to simulate work used in all agencies to include the following:

- Requisition to check
- Financial posting to clearing
- Budget transfers
- Reporting of financial data
- Supplier Relationship Management: Shopping cart to check and financial reporting

By the time an agency is ready to "Go Live," the









# Connecting People and Information

agency staff will have received detailed training to prepare for their new business environment.

### VOTER REGISTRATION DATABASE COMPARISON

The CIO partnered with the South Carolina State Election Commission to prevent voter fraud by purging voter rolls. The pilot program – South Carolina served as the host state – compared voter registration databases to identify voters registered in multiple states.

At the request of the State Election Commission, CIO staff developed a Project Plan which outlined the work process for the comparison using the Applications Information System Development Methodology (ISDM). The work process included the selection of the data fields to be compared from each state, the method to transfer the files to South Carolina and the technology and workflow to be used for the comparison as well as statistical reporting.

An initial edit to eliminate duplicate registrations within each state file was completed by comparing the Social Security number (SSN), date of birth, last name and the first three characters of the first name.

States nationwide used the pilot program developed and maintained by the CIO as a model to compare voter registration databases.

## CUSTOMER WORK ORDER FULFILLMENT (CWOF) UPGRADE

The Customer Work Order Fulfillment (CWOF) V5.4 migration project was completed by July 1, 2006. An integrated management tool, CWOF will

simplify the workflow process, provide increased levels of customer support and enhance employee efficiency. Customers will benefit from an improved invoice presentation and the positioning of the CIO to make CWOF available to its customers via a Web portal.

## EMPLOYEE INSURANCE PROGRAM (EIP) MIGRATION

At the end of fiscal year 2005, the Employee Insurance Program (EIP), insuring 410,000 plus, separated from the South Carolina Retirement Services and went live on the new environment.

At the CIO Data Center, a solution similar to the Retirement Systems' was designed and implemented on HP-UX and HP Intel servers. Taking approximately six months to plan and complete migration, this system includes application, job scheduling, Web and imaging services with backend Adabas and Oracle databases running in the HP-UX environment.

#### PRINT AND MAIL FACILITY

CIO's Print and Mail facility provides high-speed laser printing, document finishing and delivery, online document viewing, and design and print of electronic forms – known as "host to post" service.

Currently, five South Carolina State agencies, six counties and one city have taken advantage of this cost saving method of printing which provides faster turnaround times, cleanses and validates postal addresses, presorts up to a five-digit zip code, maintains the "chain of custody" for sensitive documents, and reduces the need for third party mail vendors.



# Connecting People and Information

### **PROFILE**

The CIO is a major operating unit under the South Carolina Budget and Control Board (B&CB).

As one of the Board's major operational offices, the CIO sets the direction for the State's use of technology and supports the provision, use and administration of information technology (IT) in government.

Sections within the CIO include:

- Value Chain
- South Carolina Enterprise Information System (SCEIS)
- Enterprise **Operations**
- Enterprise Projects and Portfolio Management

The VALUE

CHAIN, formerly

(L-R) Barbara Teusink, Deputy CIO; Pat O'Cain, Deputy CIO; Jim Bryant, State CIO; Tom Fletcher, Deputy CIO; and Chuck Fallaw, Deputy CIO

Support Services, provides accountability and oversight of CIO's change, project, financial and human resource management teams and assistance to customer agencies in the area of IT procurement services.

Its Customer Relations (CR) team supports new and existing business partnerships. The CR team introduces our customers to CIO products and

services, handles complex proposals and Service Level Agreements and keeps our customers abreast of developments in technology that will advance their business growth.

The Project Management team supports our customers in implementing effective project management practices through methodology,

training and certification programs, reporting, information resources, highly-trained and experienced staff and support of, and participation in, numerous project management forums, committees, meetings and organizations



In addition, the Grants Development and Administration team offers our customers grants training opportunities and guidance through grants application processes.

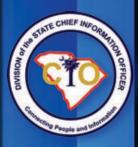
throughout the State and nation.

Deputy CIO Barbara Teusink directs this administrative and managerial segment of the State CIO.









# Connecting People and Information

The SOUTH CAROLINA ENTERPRISE INFORMATION SYSTEM (SCEIS), the enterprise software architecture that operates on the CIO's enterprise infrastructure, provides common software that will bring virtually all State agencies, commissions and boards onto a single business information system.

Deputy CIO Chuck Fallaw directs this segment of the State CIO to ensure the successful statewide implementation of this highly automated system.

ENTERPRISE OPERATIONS combines the software with the hardware to deliver various technologies and services to our customers via the enterprise network. The management of these technologies and services to agencies and endusers is provided by the following teams:

- Application Services supports agency requests for systems development and maintenance.
- Enterprise Computing Services provides servers, virtual servers, large capacity storage and backups and desktop support.
- IT Services and Support provides a single point of contact into the Enterprise Operations section of the CIO to manage customer requirements, orders and troubles.
- Mainframe Computing Services provides mainframe support and print and mail services.
- Network Services provides management and operations of statewide voice, data and video networking technologies.
- Security is responsible for the security policies and infrastructure protection issues related to the State's IT infrastructure.

Deputy CIO Tom Fletcher directs the network and computing infrastructure segment of the State CIO.

ENTERPRISE PROJECTS AND PORTFOLIO MANAGEMENT provides for the development of enterprise IT solutions for communities of interest such as education, fleet management, health care and law enforcement; IT planning; and project management (PM) best practices.

The IT Planning and Management Services team oversees the State's long-term IT Strategic Plan, sets the State's course with regard to the next generation of technology, oversees working committees of the State's IT professionals which establish architecture standards and policies, identifies new enterprise initiatives that generate a return on investment to State government and its customers, and prepares a statewide IT plan for presentation to the State CIO and the South Carolina General Assembly.

Deputy CIO Pat O'Cain directs this segment responsible for the collection of enterprise projects into the State CIO's portfolio.

#### About the Board

The B&CB is chaired by the Governor and has, as other ex officio members, the State Treasurer, State Comptroller General, Chairman of the Senate Finance Committee and Chairman of the House Ways and Means Committee. The B&CB has broad responsibilities for a number of central administrative and support functions in South Carolina State Government.







# Connecting People and Information

### **ENTERPRISE INITIATIVES**

Using an enterprise or statewide approach, the CIO has formulated a cost effective, standards-based approach to providing customer-centric information technology (IT) solutions to every South Carolinian.

The CIO's roles and responsibilities in implementing this enterprise approach are:

- IT Leadership Statewide
- Voice for the IT Community
- Connecting People and Information across all boundaries

To accomplish these roles and responsibilities, the CIO developed a framework

for communicating this State CIO vision.

Recognizing that every South Carolinian is the ultimate customer of this public services framework, the model on this page forms the basis for connecting our South Carolina Architecture Oversight Committee standards and IT Best Practices with all of our State's citizens.

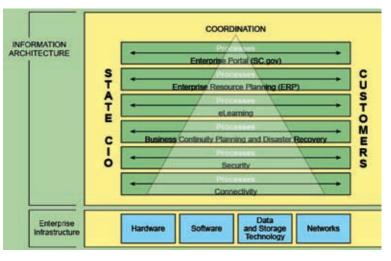
Outlined in the chart are the components of the public services framework.

#### **ENTERPRISE PORTAL**

The State CIO vision begins with providing every South Carolinian with an entry point, or portal, into the State's information systems that support public services.

This portal, SC.gov, is a vendor hosted solution that is completely self-funded by the projects

initiated from State agencies and other governmental entities. SC.gov offers cost saving features such as a payment engine, Content Management Server and online shopping mall and is governed by key



State CIO Vision - Public Services Framework

South Carolina stakeholders who make up the eGovernment Oversight Committee.

While establishing all strategic policies governing the portal, the eGovernment Oversight Committee is also responsible for approval of development/implementation priorities; review and approval of all charges to portal users; review and approval of service level agreements and statements of work negotiated by governmental entities with the









# Connecting People and Information

portal manager; and review of the portal's annual operating reports, customer satisfaction surveys and performance measures.

## SOUTH CAROLINA ENTERPRISE INFORMATION SYSTEM (SCEIS)

To help manage its core finance, procurement, human resources and payroll functions more efficiently and effectively, the State advanced a vision to establish a single enterprise information system for South Carolina.

Revolutionizing the way South Carolina government conducts business, the SCEIS system combines the State's full 160 stand alone finance and human resources databases into a single business information system. The principal objectives of this system are to reduce the State's administrative costs; improve the accuracy, timeliness and security of financial transactions and information; and improve services provided to the State's citizens and businesses.

The SCEIS system also includes a complementary objective of reducing the State's reliance on paper forms and documents by integrating document imaging software and services into the SAP solution.

Using the SAP solution, this highly automated system will speed up, standardize and enhance the State's business processes, while greatly reducing opportunities for clerical errors and providing better financial reports.

SCEIS is an Enterprise Resource Planning (ERP) system that forms a shared framework (enterprise

software architecture) that will link and combine finance and human resources databases and, as it evolves, education, healthcare, law enforcement and fleet management.

An important initiative underway at the CIO is the development of Communities of Interest (CoI) that represent governmental entities involved with education, healthcare, law enforcement and fleet management. Stakeholders from each area will integrate their stand alone information systems into a single shared database warehouse.

To help guide and coordinate statewide implementation activities, the Comptroller General joined with other key State agencies to establish the SCEIS Executive Oversight Committee and SCEIS User Group. The Oversight Committee strategically guides and coordinates SCEIS from a statewide perspective. It also provides direct executive support for all implementation activities, including assistance in acquiring funding and working with the executive and legislative leadership of the State to promote the project.

The SCEIS User Group currently includes senior financial personnel from 19 South Carolina State agencies. The User Group works with the Oversight Committee to help identify, communicate and advance discussion and resolution of user requirements and issues.

#### Knowledge Management

Knowledge Management is another critical strategy spearheaded by the CIO in the summer of 2006. Over 30 percent of the State government work force will be eligible for retirement within the







# Connecting People and Information

next two years, necessitating a requirement to capture this "experienced information," store it and disseminate it to other employees. The CIO leveraged this strategy and procured a learning and Knowledge Management Solution (KMS) that is also governed by stakeholders and self-funded to maintain the KMS.

KMS is an Internet-hosted, human capital management and development platform that enables organizations to capture, create, manage and share knowledge to improve workforce productivity, accelerate critical business processes and drive organizational performance. The system centralizes and automates the entire learning management process, making the administration of enterprise learning and development both effective and efficient.

An even more important role that the KMS extends is eLearning. The CIO partnered with the Department of Education and the Education and Economic Development Act task force to procure this seamless statewide capability that provides eLearning from our youngest children all the way through a lifetime to their senior years.

This statewide eLearning system also features a seamless learning management system, learning content management system and interactive collaboration tools. Through this partnership, the CIO provides a single system on a 24/7/365 education avenue that greatly reduces the social divide in education, as well as enabling all South Carolinians to get the right education, at the right time in their lives.

Over the course of the next several years, the

implementation and use of this eLearning system will raise the educational level of our citizens and prepare them for entering the information and knowledge economy that the business leaders in our State are developing through Industry Councils.

The purpose of the South Carolina Government/ Industry Council is to provide for effective communications, cooperation and consultation between the CIO and the Information Technology Management Office (ITMO). This is achieved by communicating the CIO's customer activities and other governmental activities in the South Carolina area with private industry in order to foster improvements in the productivity of contracting and the quality of the end product for the mutual benefit of government and industry.

The Council, which consist of a General Council and an Executive Committee, will explore and develop methods of quality/productivity improvement; foster a spirit of cooperation; provide a forum to share new ideas and initiatives; and suggest changes to applicable policies, regulations and statutes through the appropriate channels.

### Business Continuity Planning and Disaster Recovery Planning

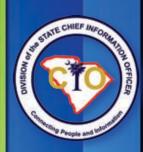
Business continuity and disaster recovery planning are important strategies directed by the South Carolina Legislature for all State agencies.

The CIO has implemented this strategy for critical systems managed at the CIO in partnership with vendor-hosted, SunGard Availability Services, disaster and business continuity planning. Working in partnership with SunGard, the CIO today









# Connecting People and Information

utilizes a primary recovery site in Pennsylvania with access to alternate recovery sites across the United States. Also, the CIO implements best practices with off-site backup rotations.

#### **Emergency Communications**

Equally important to Disaster Recovery and Business Continuity is the interoperable communications provided by the CIO's Emergency Support Function (ESF) known as the South Carolina 800 MHz Radio and Mobile Data System (Palmetto 800 MHz). This self-supporting, vendor hosted, Motorola, capability provides the communications for public safety and law enforcement operations both on a routine and emergency basis.

Over 350 different agencies representing state, federal and local governments; law enforcement agencies; fire services, emergency medical services and power utilities in South Carolina, North Carolina and Georgia currently participate in the shared statewide Palmetto 800 MHz System. With nearly 20,000 users currently, the CIO's goal is to increase the users to 25,000 in 2007, construct a completely redundant conventional 800 MHz System and convert from a mobile coverage system to a handheld coverage system.

Working together cooperatively, the CIO, Motorola and the Palmetto 800 MHz Users Advisory Committee manage the cost of operating the statewide system. Elected to two-year terms by the system users, Advisory Committee member positions represent: State and local law enforcement, fire and emergency medical services, emergency management, power utilities, large system users (over 500 units), and at-large State and local government system users. Held in the fall and spring of each year, all system users are invited to attend these system-wide Users Group meetings.

#### SECURITY

CIO manages information security through a defense strategy over the Data Center network and agencies attached to the network. There is also an offensive strategy where the Information Security Manager performs penetration testing and review of this same network's defenses to ensure there are not any vulnerabilities or exposures.

Agencies not attached to the CIO's network manage their own security analyses and posture to include firewalls, antivirus and intrusion detection capabilities.

The CIO also manages the South Carolina Computer Security Incident Response Team (SC-CSIRT) created in October 2003. The purpose of the SC-CSIRT is, first to assist members of the South Carolina government community in implementing proactive measures to reduce the risks of computer security incidents, and second, to assist the South Carolina government community in responding to such incidents when they occur.

In addition to security events, SC-CSIRT analyzes and distributes information on best practices and security awareness programs, to federal, state, county and local levels.







# Connecting People and Information

#### NETWORK ACCESS AND SPEED

The CIO has been rolling out a greatly improved network with increased access and speed to all of South Carolina over the last year. This high-speed, low cost access is known as the Multiprotocol Label Switching (MPLS) network and replaces older technology. The South Carolina MPLS Core Network Topology is illustrated on this page through a diagram provided by the vendor team, Spirit Telecom, that supports this and the network's security.

The MPLS network represents both advanced, highspeed access for the public, as well as a building block for the wireless architecture and access capabilities. South Carolina Speaker of the House, Bobby Harrell, commissioned a study to outline the potential of a wireless network. Additionally, MPLS, because of its access capabilities and speeds, is a building block for the other technologies distributed

today by the CIO – enterprise portal, SCEIS, Knowledge Management and Business Continuity Planning and Disaster Recovery Planning – as well as future technologies – Internet Protocol (IP) telephony and wireless.

The State network is known as the South Carolina Information Network (SCINET). The membership of SCINET includes one representative from each agency as designated by the agency's information technology officer and is called the SCINET User Council.

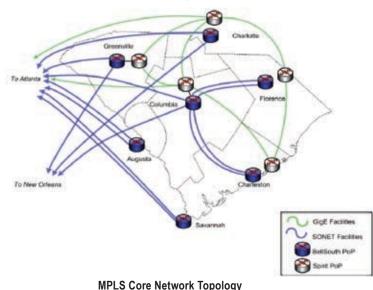
The mission of the User Council is to advise the CIO on utilization of

network technology and the network technology of agencies and to provide a forum for exchange of information and discussion of the needs of network technology activities in government and education in South Carolina.

#### Enterprise Infrastructure

The State Data and Telecommunications Center is the nerve center for all communication throughout South Carolina. The CIO merges and manages the hardware, software, networks, data and storage technologies to provide IT services statewide. To benefit all South Carolina citizens, the CIO is moving toward an Internet protocol telephony and a wireless "cloud."

Through public and private sector partnerships we will achieve our goal, and realize the State CIO's vision, to deliver IT services on demand across all boundaries, to every South Carolina citizen.











# Connecting People and Information

### **BUSINESS RESULTS**

During fiscal year 2006, the CIO used a third party reviewer, the Gartner Group, to balance the CIO's costs for each in-scope area with the workload for that area. This approach to IT benchmarking allows Gartner to measure the efficiency of its IT environment by comparing its cost on a per unit basis with the costs of average peers and top performing organizations.

Gartner found that spending for all IT services analyzed were less than peer group comparisons:

- 60 percent less than government peers
- 58 percent less than workload peers
- 31 percent less than workload 25th percentile peers

In addition, the analysis concluded that the CIO ranked "Best in Class" overall, with rankings by service as listed below.

### More Efficient than Best in Class

- Local Telephone Services
- Service Center Services
- AS400 Support
- Linux Support
- UNIX Support
- Wintel Support

#### Consistent with Best in Class

- Long Distance Services
- Client Desktop and Peripheral Support

#### Close to Best in Class

• Mainframe Services

### Telecommunications Services

The State CIO reduced the cost of long distance services three times during the past five fiscal years. Gartner results reflected long distance services costs were 63 percent less than government peers and 45 percent less than workload peers. Please see the chart titled, "CIO-Provided Long Distance Service Average Cost Per Minute." on page 16.

Customer demand resulted in an increase in digital ports which provide improved services at a slightly increased cost. However, the Gartner analysis reflected CIO local telephone costs were 87 percent less than government peers, 98 percent less than workload peers and 64 percent less than workload 25th percentile peers. Please see the chart titled, "CIO-Provided Local Telephone Service Average Monthly Port Charge," on page 16.

The Service Center cost per call is below the Gartner workload peer group: 30 percent less than government peers, 27 percent less than workload peers and 21 percent less than the 25th percentile peers. Please see the chart titled, "Service Center Cost Per Call," on page 17.

#### Mainframe Computing Services

The Mainframe Computing Services mainframe processors and storage capacity are monitored to ensure capacity is available to meet customer requirements. The CIO mainframe capacity increased by 11 percent while mainframe cost increased only 3.9 percent. Mainframe capacity was increased from 711 to 821 MIPS. Please see the chart titled, "Mainframe Cost and Capacity," on page 17.



# Connecting People and Information

### CIO-PROVIDED LONG DISTANCE SERVICE AVERAGE COST PER MINUTE



The Division of the State Chief Information Officer (CIO) reduced the cost of long distance services three times during the past five fiscal years.

## CIO-PROVIDED LOCAL TELEPHONE SERVICE AVERAGE MONTHLY PORT CHARGE

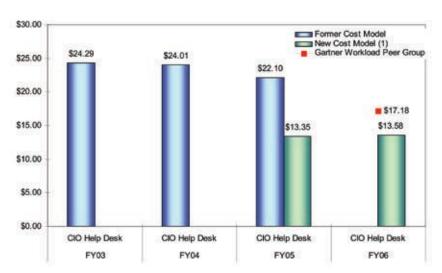


\* Customer demand resulted in an increase in digital ports.
Digital ports provide improved services but at an increased cost.



# Connecting People and Information

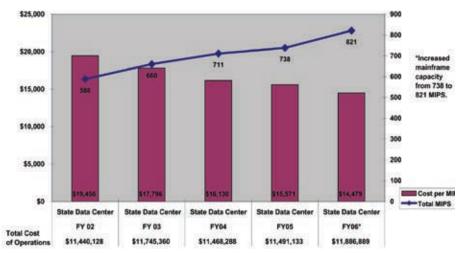
#### SERVICE CENTER COST PER CALL



(1) This cost model has been modified to more accurately reflect industry standards as recommended by the Gartner Group.

NOTE: Call volume includes both voice and data customer calls to the CIO Service Center.

## MAINFRAME COST AND CAPACITY STATE DATA CENTER



CIO mainframe capacity increased by 11% while mainframe cost increased only 3.9%.

# Connecting People and Information



### **CONCLUSION**

The CIO remains faithful in its commitment to provide you, our customer, high quality, cost effective information technology products and services while leading the State's enterprise vision and technology infrastructure. Through cooperative and collaborative partnerships, we can build upon the State CIO's enterprise vision

to ensure that information technology touches and serves every citizen in every corner of our State.

We look forward to another year of cooperation and innovation that will foster connecting people and information through state-of-the-art products and services.